

Title (en)  
COMMUNICATION METHOD AND DEVICE, ECU, VEHICLE AND STORAGE MEDIUM

Title (de)  
KOMMUNIKATIONSVERFAHREN UND -VORRICHTUNG, ECU, FAHRZEUG UND SPEICHERMEDIUM

Title (fr)  
PROCÉDÉ ET DISPOSITIF DE COMMUNICATION, UNITÉ DE COMMANDE ÉLECTRONIQUE, VÉHICULE ET SUPPORT D'ENREGISTREMENT

Publication  
**EP 4080818 A1 20221026 (EN)**

Application  
**EP 21206903 A 20211108**

Priority  
CN 202110420141 A 20210419

Abstract (en)  
A communication method and device, an ECU, a vehicle and a storage medium are provided, which relate to the technical field of vehicles. When communication state information of a first ECU against a second ECU is first state information, the first state information is sent to the second ECU. Verification information is sent to the second ECU if a communication verification request sent by the second ECU based on the first state information is received. Feedback information sent by the second ECU based on verification information is received. When the feedback information conforms to a preset rule, the communication state information is changed to second state information and an encryption key is sent to the second ECU, wherein the encryption key is configured to encrypt messages during communication process between the first ECU and the second ECU. In this way, messages in the communication between ECUs are encrypted by the encryption key to improve security, and communication verification is performed before the ECUs get a same encryption key, and the ECUs get the same encryption key and communicate with each other only after the communication verification, thereby improving communication security between the ECUs.

IPC 8 full level  
**H04L 9/40** (2022.01)

CPC (source: CN EP)  
**H04L 12/40** (2013.01 - CN); **H04L 63/0428** (2013.01 - CN); **H04L 63/062** (2013.01 - EP); **H04L 63/08** (2013.01 - EP); **H04L 67/12** (2013.01 - CN); **H04L 2012/40215** (2013.01 - CN); **H04L 2012/40273** (2013.01 - CN)

Citation (search report)

- [XYI] WO 2020219128 A1 20201029 - DEERE & CO [US]
- [XAI] US 2020177398 A1 20200604 - TAKEMORI KEISUKE [JP], et al
- [Y] US 2020162436 A1 20200521 - YANG YANJIANG [SG], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4080818 A1 20221026; EP 4080818 B1 20240724**; CN 113162928 A 20210723; CN 113162928 B 20230331

DOCDB simple family (application)  
**EP 21206903 A 20211108**; CN 202110420141 A 20210419